

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

1. (Original) A method, comprising:

directing a client's request for an information object to an information object repository without regard as to whether the information object is actually stored at the information object repository; and

determining, according to information included in a uniform resource locator (URL) whether the client is authorized to receive the information object.

2. (Original) The method of claim 1 wherein the information object repository is selected according to specified performance metrics.

3. (Original) The method of claim 2 wherein the specified performance metrics comprise one or more of: average delay from the information object repository to the client, average processing delays at the information object repository, reliability of a path from the information object repository to the client, available bandwidth in said path, and loads on the information object repository.

4. (Original) The method of claims 2 further comprising instructing the information object repository to obtain a copy of the information object.

5. (Original) The method of claim 2 wherein the information included in the URL comprises information identifying the requesting client.

6. (Original) The method of claim 5 wherein the information included in the URL further comprises information identifying an owner of the information object.

7. (Original) The method of claim 2 wherein the information included in the URL comprises one or more digital signatures.

8. (Original) The method of claim 7 wherein the one or more digital signatures identify one or more of: the requesting client, and an owner of the information object.
9. (Original) The method of claim 2 wherein the information included in the URL is compared with an access list at the information object repository to determine whether the client is authorized to receive the information object.
10. (Original) The method of claim 2 further comprising denying access to the information object if the client is not authorized to receive the information object, otherwise, returning the information object to the client.
11. (Original) The method of claim 2 wherein the information included in the URL comprises multiple digital signatures and each digital signature is compared with an access list at the information object repository to determine whether the client is authorized to receive the information object.

12. (Original) A method, comprising:

assigning a set of access control labels to each of a number of users of a caching infrastructure in a network, the labels to be used in specifying access control lists for content of the users;

referring requests for the content to selected information object repositories of the caching infrastructure without regard as to whether the content is actually stored at the information object repositories; and

controlling access to the content according to access lists developed according to the access control labels.

13. (Original) The method of claim 12 wherein the information object

repositories are selected according to specified performance metrics.

14. (Original) The method of claim 13 wherein the specified performance metrics comprise one or more of: average delay from a selected one of the information object repositories to a source of a corresponding one of the requests, average processing delays at the selected one of the information object repositories, reliability of a path from the selected one of the information object repository, available bandwidth in said path, and loads on the selected one of the information object repositories.

15. (Original) The method of claim 12 wherein access is controlled by comparing information included in uniform resource locators (URLs) to the access control lists.
16. (Original) The method of claim 15 wherein the information included in the URLs comprises one or more digital signatures.
17. (Original) The method of claim 16 wherein the one or more digital signatures identify one or more of: the source of the requests, and an owner of an information object being requested.
18. (Original) The method of claim 12 further comprising maintaining the access control lists corresponding to the access control labels.
19. (Original) The method of claim 12 wherein the access control labels are hierarchical in nature.

20. (Original) The method of claim 12 wherein each of the information object repositories of the caching infrastructure stores a copy of each of the access control lists.

21. (Original) The method of claim 12 further comprising denying access to content if a request therefor is not authorized, otherwise, returning the content to a requestor thereof.